

*For the Library*

*So*  
=: Little Bolton :=

URBAN DISTRICT COUNCIL.

---

# HEALTH REPORT

. . . AND . . .

## STATISTICS

. . . FOR . . .

*Year Ending December 31st, 1903.*

---

J. H. Marsh, Medical Officer.

---

**Bolton :**

THE DAILY CHRONICLE OFFICE, KNOWSLEY STREET.

1904.



# Medical Officer's Report.

---

MOORSIDE, LITTLE HULTON.

MARCH 5TH, 1904.

*To the Chairman and Members of the Little Hulton  
District Council.*

GENTLEMEN,

I have pleasure in submitting to you my Seventh Annual Report on the Health and Sanitary Conditions of the Little Hulton Urban District for the Year 1903.

Area of District in Statute Acres .....	1699
Total Population of All Ages .....	7294
Number of Inhabited Houses .....	1565
Average Number of Persons per House .....	4.6

**Births** registered during the year were 199 (98 Males and 101 Females), a decrease of 44 on last year and equal to a rate of 27.2 per 1000 of estimated population ; as against 33.3 in 1902.

**Deaths** numbered 94 (47 Males and 47 Females), four less than last year, and giving a rate of 12.8 per 1000 ; a decrease of 0.6 on the low rate of 1902. This year's rate is the lowest since 1897 and much less than the average rate for the past six years, which is 15.63 per 1000. The Death Rate of the Urban Districts in the Administrative County of Lancaster for 1902 was 15.43.

**Increment.**—Increment of Life, viz., the excess of Births over Deaths, was 105 (51 Males, 54 Females).

Table IV. gives the Mortality in Age, Groups, and Summary of Causes of Death.

**Infant Mortality.**—The deaths of children under one year old numbered 20, five less than last year ; and were caused by—Diarrhoea 5, Tubercular Diseases 2, Bronchitis 2, Premature Birth 4, and other Infantile Diseases, such as Convulsions, &c., 7 ; equivalent to a Death-rate of 2.7 per 1000 of the population, and 100.5 as compared



with 1000 Births. You will observe by Table I. that this year's rate is the lowest since 1897 and compares most favourably with the average rate during that period, viz., 141·7. These deaths account for 21·2 per cent. of the total deaths.

**Zymotic Mortality.**—The number of deaths caused by the Seven principal Zymotic Diseases, viz., “Smallpox,” “Measles,” “Scarlet Fever,” “Whooping Cough,” “Enteric Fever,” “Diarhœa,” “Diphtheria and Membranous Croup,” was 12, the same number as last year, giving a rate of 1·64 per 1000. Measles accounted for two of the deaths, Diphtheria one, Enteric Fever one, and Diarrhœa (under which are now classified several other distinct diseases) eight.

**Respiratory Diseases.**—The three Diseases, “Bronchitis,” “Pneumonia,” and “Pleurisy” were responsible for 21 deaths, a decrease of four compared with last year, and equal to a rate of 2·8 per 1000 ; the rate for the Urban Districts in the County being 3·04 in 1902. A large number of these deaths were persons over 60 years old.

**Phthisis**—adopted by you a Voluntary Notifiable Disease—was the cause of three deaths, giving a rate equal to 0·41 per 1000. I am pleased to say the deaths this year from this preventible disease were six less than in 1902. They were all members of one family, living in the same premises in Smithfold Lane, one of the most insanitary parts of your District ; and had it been possible to have removed the first case affected in the early stages of the illness, in all probability the other two would not have contracted the disease. It is to be hoped that the Lancashire County Council will provide in the near future Sanatorias, more particularly for those affected persons who are too poor to pay for treatment in the existing ones. It is recognised that the predisposing causes to Tuberculosis are overcrowding, ill-ventilated rooms, dirty, dark, damp dwellings, intemperance, and bad or insufficient food.

**Infectious Diseases.**—The number of cases notified was 128, viz. : Smallpox 1, Erysipelas 6, Membranous Croup and Diphtheria 26, Enteric Fever 8, Puerperal Fever 2, Phthisis (Voluntary) 1, and Scarlet Fever 84. This is much the largest number notified since you adopted the Act, almost double any previous year's, the chief increase being due to Scarlet Fever. Forty-four cases were removed to the Farnworth Hospital, as against 18 last year, 38 of them being Scarlet Fever, 3 Enteric Fever, 3 Diphtheria, and 1 Smallpox. I have again to thank the School Teachers for sending me lists of children suffering from other Infectious Diseases.

**Smallpox.**—One case occurred in May, a young man residing in Clegg Lane, who contracted the disease whilst on a visit in Manchester. He was at once re-vaccinated and removed to the Farnworth Hospital, together with his infected clothes and bedding, most of which were destroyed. All the contacts, over 20 in number, were re-vaccinated and kept under supervision a couple of weeks. The family were quarantined for 12 days, food being supplied by you per Mr. Davies, Sanitary Inspector. The House was afterwards fumigated twice, furniture and woodwork washed with disinfectants, wall stripped and re-papered, and all the ceilings well lime-washed. These measures no doubt stopped the disease spreading.

**Membranous Croup and Diphtheria** accounted for 20 per cent. of the total notified cases : a large increase on last year. Some of the cases were evidently of a mild type and others were associated with Scarlet Fever. Most of these affected children lived in the unpaved side-streets, in damp houses ; conditions favourable to these diseases. Anti-Diphtheric Serum is now supplied by you to the Medical Men free of charge.

**Enteric Fever.**—It is pleasing to note that each year the number of these cases has decreased, this year's being the lowest since 1899. Of the eight cases notified three were in Croft-street and one in Barrow Fold, practically adjoining streets, the insanitary conditions of which I have before reported to you. As typhoid and other allied diseases have occurred during the past two years on these same premises I trust you will insist on the necessary alterations being made and effects remedied.

**Measles.**—Though there have been a number of cases during the year in the several parts of the District there has been no marked outbreak. It will always be difficult to control this disease, being not notifiable, and as parents have the idea that it is a disease inevitable and trivial they not only do not recognise the desirability of isolation, but allow the children to mix together and attend school until the rash appears, the catarrhal stage, viz., the period of illness before the rash shows itself being mostly highly infectious.

**Scarlet Fever.**—These cases amounted to 65 per cent. of the total number of Infectious Diseases notified. The Fever was most prevalent in the first and last quarters of the year. As the notifications



in December were mainly scholars attending Peel Schools, I visited the schools and examined each scholar, finding a number who were evidently recovering from mild attacks of the Fever (one particularly, with a discharging abscess in the neck), all capable of infecting others. These children were kept under observation and the schools closed a few days earlier than the usual Christmas vacation. I attribute the large increase of Scarlet Fever to three causes—(1) Unrecognised Cases ; (2) Insufficient Home Isolation of mild attacks, especially during convalescence ; (3) Recurrent Hospital Cases, viz., children who, when sent home, are capable of infecting others, maybe owing to some nasal or throat trouble developing a day or so after leaving Hospital. As a means of removing this last cause I have arranged with the Matron of the Hospital to telephone me when a case is dismissed, and parents are then instructed not to allow any of the family either to attend school or any other public place for at least a week. You have also under consideration my recommendation to secure, if possible, certain suitable premises in the District, where cases sent from Hospital can be isolated for a further period of say a fortnight, prior to returning to their own homes. This will be a means, I feel sure, of preventing these return cases.

**The Water Supply** has been ample and of good quality.

**Slaughter Houses, Dairies, and Cowsheds** have been inspected, and the general cleanliness and lime-washing were fairly satisfactory. Some of the slaughter-houses are evidently occasionally used for storing cattle and sheep. Strict orders were given to discontinue same. Few structural alterations have been made at the Farms during the year, and there are still existing defects to which I have before drawn your attention, especially as regards ventilation. The majority of the Farmers in the District have the idea that to get a large yield of milk it is essential that cattle should be kept “warm,” the result being that the air inlets are blocked. For a time, no doubt, the supply of milk *is* increased, but not only is the quality lowered but the constitution of the animals suffer, and there is no doubt that it is mainly due to the want of proper ventilation that there is such a large amount of tuberculosis in stalled cattle. Grooming of cattle, which ought to be done daily, is hardly ever thought of, and it is a too common sight to find in the winter months dairy cows caked with dung about their hindquarters, a great source of danger to the milk,

**General Sanitary Matters.**—Mr. Davies deals fully with these in his report, appended. I have to congratulate you on the many improvements that have been made during the year; the Paving of Backyards, the Re-construction of a large number of Defective Privy-middens (replacing by Water-carriage System), the laying of a New Sewer for the Hilton Lane portion of your District, the New Town's Yard, the Extension of the Sewage Disposal Works, the continued high standard of the Effluent, and on the Tip acquired in Smithfold Lane.

**Factories and Workshops.**—These have all been visited, and were found in much the same condition as last year. The Wholesale Bakehouse referred to in my last Annual Report as being in an unsatisfactory condition was even more so when last inspected. I regret to say also the closets in the Worsley Road Mill have not been improved in any way.

Im am,

Yours obediently,

JOHN HOLT MARSH,

Medical Officer of Health.



TABLE I.

**Vital Statistics of Whole District during 1903 and  
Previous Years.**

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.			
		Number.	Rate.	Under 1 Year of Age		At all Ages.	
				Number.	Rate per 1000 Births registered.	Number.	Rate.
1897	7178	226	31'4	34	150'4	117	16'29
1898	7256	222	30'5	38	171'1	115	15'84
1899	7256	221	30'45	29	131'22	122	16'81
1900	7256	204	28'1	35	171'5	124	17'09
1901	7256	225	31'06	27	120	105	14'4
1902	7294	243	33'3	25	102'8	98	13'4
Aver- ages for years (six) 1897- 1902	...	...	30'8	...	141'17	...	15'63
1903	7294	199	27'2	20	100'5	94	12'8

Area of District in acres (exclusive of area covered by water 1699 statute.

Total Population at all Ages.....7294	} At Census of 1901.
Number or Inhabited Houses .....1551	
Average Number of Persons per House .....4'7	



TABLE II.

Cases of Infectious Disease Notified during the  
Year 1903.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.					NO. OF CASES RE- MOVED TO HOS- PITAL FROM EACH LOCALITY.
	At all Ages.	At Ages—Years.				
		1 to 5.	5 to 15,	15 to 25.	25 to 65.	
						At all Ages.
Smallpox ...	1	...	...	...	1	1
Cholera ...	...	...	...	...	...	...
Diphtheria ...	23	5	9	1	8	3
Membranous Croup ...	3	3	...	...	...	...
Erysipelas ...	6	...	...	2	4	...
Scarlet Fever ...	84	28	52	2	2	38
Typhus Fever ...	...	...	...	...	...	...
Enteric Fever ...	8	1	...	...	7	3
Relapsing Fever ...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...
Puerperal Fever ...	2	...	...	...	2	...
Plague ...	...	...	...	...	...	...
Pulmonary Tuberculosis (Vol)...	1	...	...	1	...	...
Totals ...	128	37	61	6	24	45

TABLE III.

## Causes of, and Ages at, Death during 1903.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.						
	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
Smallpox .....	..	..	..	..	..	..	..
Measles .....	2	..	2	..	..	..	..
Scarlet Fever .....	..	..	..	..	..	..	..
Whooping Cough ...	..	..	..	..	..	..	..
Diphtheria and Mem- branous Croup.....	1	..	..	1	..	..	..
Croup .....	..	..	..	..	..	..	..
Fever } Typhus.....	..	..	..	..	..	..	..
	1	..	..	..	..	1	..
	..	..	..	..	..	..	..
Epidemic Influenza...	2	..	..	..	..	..	2
Cholera .....	..	..	..	..	..	..	..
Plague .....	..	..	..	..	..	..	..
Diarrhœa .....	8	5	3	..	..	..	..
Enteritis .....	..	..	..	..	..	..	..
Puerperal Fever .....	2	..	..	..	..	2	..
Erysipelas .....	..	..	..	..	..	..	..
Other Septic Diseases.	..	..	..	..	..	..	..
Phthisis .....	3	..	1	1	1	..	..
Other Tubercular Diseases .....	3	2	1	..	..	..	..
Cancer, Malignant Disease .....	3	..	..	..	..	2	1
Bronchitis .....	12	2	1	..	..	4	5
Pneumonia .....	9	..	1	1	1	6	..
Pleurisy .....	..	..	..	..	..	..	..
Other Diseases of Respiratory Organs.	..	..	..	..	..	..	..
Alcoholism } Cirrhosis of Liver }	2	..	..	..	..	2	..
Venereal Diseases ...	..	..	..	..	..	..	..
Premature Birth .....	4	4	..	..	..	..	..
Diseases and Acci- dents of Parturition.	..	..	..	..	..	..	..
Heart Diseases .....	3	..	..	1	..	1	1
Accidents.....	..	..	..	..	..	..	..
Suicides .....	..	..	..	..	..	..	..
Inquests .....	5	..	1	..	..	3	1
All other Causes.....	34	7	3	4	2	6	12
All Causes .....	94	20	13	8	4	27	22

# THE SURVEYOR'S REPORT.



SURVEYOR'S OFFICE,

LITTLE HULTON,

DEC. 31ST., 1903.

TO MESSRS. THE CHAIRMAN AND MEMBERS OF THE LITTLE  
HULTON URBAN DISTRICT COUNCIL.

GENTLEMEN,

I beg to submit my Annual Report of the works done in your district during the year just closed

There has been 14 dwelling-houses built in Little Hulton, the number in 1902 being 25.

Plans have been laid before your Committee for 19, and the remaining 5 are in course of erection. In addition to these particular plans there has been your approval given for the erection of a large industrial works in the westerly portion of the district, which you may reasonably expect will tend to the rapid development of a part of the district which has of late years been very quiet.

There have been allowed many alterations and additions, both to houses and work-places, for which plans were submitted. While no Private Street work has gone on during the year, you have had before you plans and sections for improving 15 streets, the aggregate length being 2305ft. of side streets, and 1598ft. of back passages, owners in many instances not availing themselves of your willingness to accept temporary repairs.



## HIGHWAYS.

You have under your charge 5 miles 0 furlongs, 89 yards of roadway made up as follows: Main Roads, 3 miles, 155 yards; Secondary Roads, 1 mile, 3 furlongs, and 93 yards; these being roads in regard to which you receive maintenance grants from the County Council, and 4 fur. and 61 yds. Private Streets which have to be entirely maintained by yourself.

The roads receiving assistance are as below:—

Manchester Road	...	Length, 3153 yds.	}	Main Roads : Grant, £240.
Clegg's Lane	...	„ 1414 „		
Worsley Road	...	„ 868 „		

Partial grants only are made to these Secondary roads:—

Hilton Lane	...	...	Length 1398 yds...	Grant, £42.
Peel Lane	...	...	„ 1115 „ ... „	£37.

Owing to the water scheme proposed to be taken down Peel Lane by the Tyldesley Council no improvement work has been executed on this road, but the consent of the County Council having been obtained to the “pooling” of the secondary road grants the money has been spent in repairing Hilton Lane.

A special grant has been made to Clegg's Lane amounting to £200; this has been expended in ballasting, excavating, macadamising, and pitch pavement.

A special grant of £70 has also been given for re-paving over portions of the surface water drain along Manchester Road, which had subsided since the completion of the Main Road Improvement. This amount has been expended on the particular work, but the trench is not yet satisfactory.

The ordinary maintenance grants have been expended on the main roads of your district, but owing to the heavy traction haulage which is now, and which has been passing over Manchester Road in particular during the past two years, the allowance hitherto made by the County Council for repairing roads in your district is proving inadequate, and will have to be considerably increased if the surface is to be kept in a satisfactory condition, as the roads are not built up for this kind of haulage.

I would suggest that in future no new paving should be done without a sufficient depth of ground being taken out which would allow for at least 8 inches of stone ballast to be put in as a foundation for the carrying of the working surface materials.

Many complaints having been made in regard to the unsatisfactory condition of the footpaths in Clegg's Lane and Worsley Road, your Council has had before it plans and sections, etc., for the proposed flagging and kerbing of these two roads, and having met with your approval they will shortly be laid before the L.G.B. with a view to the work or some sections of it being proceeded with at an early date, together with the plans for Private streets previously mentioned.

## Sewage, and Sewage Disposal.

In accordance with the sanction given by the L.G. Board to your proposal to sewer Hilton Lane, a sewer has been laid along this road, commencing at the point where the existing main trunk sewer crosses Hilton Lane. A length was laid in an easterly direction for 130 yards, average depth 16 ft. and 9 ft. pipes, which is intended to intercept and pick up the sewage from houses which may be built on a small portion of building land lying south of the main trunk sewer. We then begun the main portion of the sewer which comes in a westerly direction for a distance of 501 yards, the size of pipes being 15 inches, the average depth 12ft. 3in., and the gradient averaging 1 in 95. The sewer then turned almost due north, 12 in. pipes being used for 183 yards, depth averaging 6ft. 6in. and fall being 1 in 43.16. From Engine Fold the sewer is laid with 9in. pipes to a point about 60 yards above the L. & North Western Railway with the exception of the length passing from manhole to manhole and underneath the railway being about 35 yards which is 12in. cast iron pipes surrounded with gins. of concrete, and at a depth of 24ft. 9in. from the roadway crossing the bridge. This particular piece of work was commenced at 6 a.m. on the Sunday morning and finished ready for traffic at 9 p.m. Sunday evening. In passing under the L. & Yorkshire Railway the Company required the trench to be filled in with concrete to within 5ft. of the surface for a distance of 75 yards. The ground for  $\frac{1}{3}$  of the distance was very treacherous owing to quicksands on one part, and the crossing of a large mining "Fault" on the other part; rock was also met with for a distance 125 yards, and several loads of "crop" coal were got out.

Sixty yards of a surface water drain were put down consisting of 9in. pipes together with gullies and branch drains.

The drains from some of the houses which were polluting the watercourse we connected up to the sewer while the works were in progress, at the request of the owners; other drains have been connected since, but the gentleman who complained the most about the need for this sewer will evidently be the last to avail himself of its service.

From the two sewage works situate at Black-leach and Ellenbrook respectively a very good effluent is constantly being discharged into the stream, and the analysis of the samples taken by the Inspector on behalf of the Irwell and Mersey Joint Committee shows that the average is 0·27 grains of oxygen absorbed in a test of four hours duration, and as the standard of a fair effluent under the I. & M.J.C. is that it shall not exceed the absorption of more than 1·00 grain of oxygen in a four hours test, you may safely claim that your works are in a satisfactory state.

The whole of the work in your district receives every attention, the plans for new buildings are very carefully scrutinized and repeated visits are made during their erection and the need is greatly felt for bye-laws which shall give the power to insist that only suitable materials are used in their construction. Careful supervision is made of drains connected to your sewer, but in this department it ought to be that any drain being taken up from any cause should not be re-laid and covered in without first being passed by your officer having control of this work.

---

## LIGHTING.

The system of lighting as at present carried on in this district is far from being satisfactory. Some of the defects are that you have no control over the lamplighters, Salford having the sole appointment or dismissal of the two lighters in their district, and although there have been complaints made as to the manner in which these duties are discharged, I am not aware that Salford authorities have dealt with the matter, only by making you an offer of some nature whereby you would become the employers of these men. Having gone through this agreement I would suggest its acceptance with the exception of one



clause, whereby you appear to be required to pay sixpence per lamp per hour for any excess burning over and above the average time of burning as shown by the lighting tables sent in to the Gas Committee. Undoubtedly if this clause means just what it appears to do, it is a serious impediment to accepting the agreement ; still I am convinced that this might be arranged if a consultation was held with the Gas Engineer. You have also to pay to the Gas Committee interest at the rate of 20 per cent. per annum on the wages paid to these two lighters, and this money lending transaction would be discontinued if you could agree to the offer of the Gas Committee.

I trust you will give this matter your thoughtful consideration.



## Sanitary Inspector's Report.



Gentlemen,

I further beg to lay before you a detailed statement of the sanitary work done in your district.

Table 1 is a summary of the work accomplished during the past 12 months.

TABLE 1.

Number of nuisances dealt with	...	...	...	387
Number of visits paid to premises	...	..	...	1087
Number of letters sent...	...	...	...	141
Number of interviews with owners or agents...	...	...	...	78
Number of visits to infectious cases	...	...	...	237
Number of notices served	...	...	...	101
Number of rooms limewashed	...	...	...	149

Table 2 shows how the nuisances are made up, and table 3 how the visits have been made.

TABLE 2.

Defective :

Cellars.	Water Closets.	Drains.	Slop-pipes.	Spouts.	Ashpits.
16	2	141	3	20	63
		Houses.	Yards.	Total.	
		91	51	387	

TABLE 3.

387 visits in regard to nuisances arising on premises.  
 360 visits in regard to their abatement, and  
 340 houses have been inspected ; making a total of 1087.

**Repairs and Alterations.**—There has been 13 Privies converted into water closets, and 16 ashpits and closets re-built and 34 made in accordance with the Council's Bye-laws.

**Systematic Inspection.**—Of the 340 houses that have been inspected 215 form the portion of your Inspector's duty under the systematic inspection required by the L.G. Board, and is a house to house inspection irrespective of either complaint or nuisance, though a large number of nuisances were brought to the Inspector's knowledge by this means.

**Nuisances.**—That your officer found it necessary to serve 101 notices for the abatement of nuisances is a matter of regret to him, as more satisfaction is given when an interview or a letter pointing out the unsanitary conditions prevailing has the effect of obtaining the desired changes, and it is a pleasure to record that these milder means were successful in getting attention in 280 cases.

**Dairies and Cowsheds.**—There are 19 Dairies and Cowsheds in the district which have had 36 visits ; some of them are in a fair condition and all are kept very well limewashed but a few of them would be better for an improved system of ventilation, and one or two are deficient in cubic space. The water supply at " Bullough's " farm is not satisfactory, but an undertaking has been given that this shall be put right if anything approaching suitable arrangements can be made with the Water Company.

**Workshops.**—Each of the 19 workshops have been visited by the M.O.H. and myself and several matters were mentioned to the proprietors which have had attention, these places having again been examined to see that the complaints were not neglected.

**Factories.**—These are generally in such a condition as not to require alterations with the exception of one mill whose closets are of the old style and the approach to them is inside the mill, and it will be necessary to either convert them into water closets or remove them altogether. Some of them have no means of escaping in case of fire only by passing from one room to another by flights of steps on the inside of the mills, and these I do not consider are a reasonably safe means of escape at such times of danger as fires. I purpose reporting more fully on this particular matter in my ordinary monthly report.

**Bakehouses.**—These are kept under careful supervision and I am pleased to note that on the whole the bakers and their assistants keep them in a fairly good condition, most of them being more particularly of the “Domestic” kind.

**Slaughter-houses.**—There are both registered and licensed slaughter-houses under your control and they have been regularly inspected; they are kept in a clean and wholesome state and no complaint has had to be laid against any. One new license has been issued for premises behind No. 33 Clegg’s Lane.

**Offensive Trades.**—Two recognised offensive trades are carried on, one the trade of a gut-scraper, and the other is Tripe-dressing: neither of these trades are carried on as laid down in the Model Bye-laws and you will be asked to deal with them very shortly.

**Summonses.**—Three summonses have been issued in regard to the non-abatement of nuisances, and orders to abate were obtained in two instances, the other case being dismissed (without costs) on a technical point only, the case being otherwise proved. The work required to be done in this case was afterwards attended to without any further severe measures being taken.

**Ashpit Emptying and Removal of House Refuse.**—This is undertaken by contractors of which there are four; the district being split up into four wards. The total cost for the work is £220, and there are 776 ashpits.

The work is not done with that promptitude which the nature of it requires, many times; great pressure has to be brought to bear on the contractors and this is intensified during the last quarter of the contract, each one seeming to try how much they can leave, instead of keeping



them emptied. The Council obtained a very suitable spot for a refuse tip, but unfortunately the conditions are such as to preclude you from retaining it.

**Infectious Diseases.**—These cases are regularly visited and careful inspection made of the premises and their surroundings; disinfectants are freely supplied at these times and instructions given how to guard against them spreading, but it is a lamentable fact that either through carelessness or ignorance of the diseases in their first stage it is very easy to trace many cases which arise through direct contact, especially is this so with Scarlet Fever. Moreover when patients are sometimes effectually isolated the isolation is made of no effect owing to the mother or person in charge of the patient coming amongst other members of the family without having first taken the necessary precautions to render themselves safe as far as possible.

Your obedient servant,

JAMES T. DAVIES,

Surveyor and Inspector.

